

3x1x1 Slow Control DB Display

Update on DB organization

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- Finalisation of the 3x1x1 construction and the start of commissioning
- 22 October 2016 – final inspection of the 3x1x1 and DAQ ready
- Start of the 3x1x1 operations: data taking, shifts etc
- Qscan access to the Slow Control DB: data processing
- Slow Control/Detector Monitoring in readiness setting



- **3x1x1 Slow Control DB:**

- ≈ 1500 sensor values
- Installation and arrangement in progress

- **DB display:**

- visualization of groups for Temperature, HighVoltage, Pressure and other sensors;
- quick view of single or group of sensors;
- easy of the display operation etc;
- explanation of sensor names

- **Features of DB-display:**

- Temporal evolution of sensor values
- Simultaneous show of a large number of sensors
- Filter usage to quickly select shown sensors
- Online zooming
- Slow Control sensors description

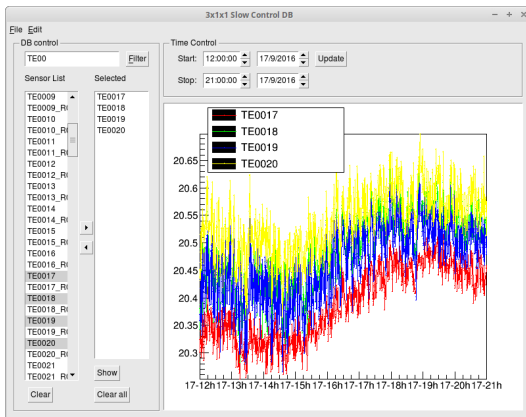
- **DB-display variants:**

- stand-alone
- webpage like as the NA61 event-display

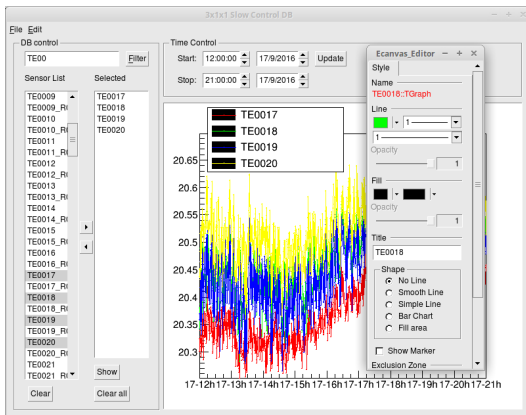


1st stand-alone variant of DB-display

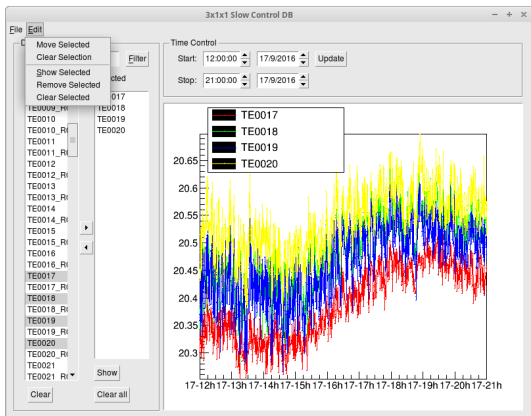
- Some examples demonstrate the DB-display stand-alone variant features
- **Filter** sensor names
- Intuitively **simple selection** of sensors to be shown
- **Time controls**



- Usage of ROOT GUI features – **Canvas editor**



- **Status bar:** File, Edit – have to be updated according to follow design



Sensor names explanation

- Thierry designed nice webpage to do easily the correspondance in between the PVSS parameters (sensors) names and friendly to context names
 - Menu
 - LEM management
 - Parameter management: Categories selection, Field name description
 - Some visualization

Rubbia Group web : WA105 experiment

Menu Temp 01 48 Pressures HT_MON CRP LM Alarms Plots comparison

Webpage to do the correspondance in between the PVSS parameter name and the Name used
Name is defined like a alias name
For example:
select pvss_name from PARAM_NAME where name='LEM_UP_01_VMON';
this return VMON0000 --> the pvss name ;
after , you can do :
select * from VMON0000 ;

Please, Select the categorie of parameter :

PVSS Name : is the name used in PVSS software (the software for the slow control)
Name : is the name you will use in the database
Description : is the description of the parameter
Validation button : After each modification of the parameter , you must click on the specific validation button

PVSS name	Name	Description	Action
HT0001	<input type="text"/>	High Volatge 001	<input type="button" value="Valid modif : HT0001 #1"/>
HT0002	<input type="text"/>	<input type="text"/>	<input type="button" value="Valid modif : HT0002 #2"/>
HT0003	<input type="text"/>	<input type="text"/>	<input type="button" value="Valid modif : HT0003 #3"/>

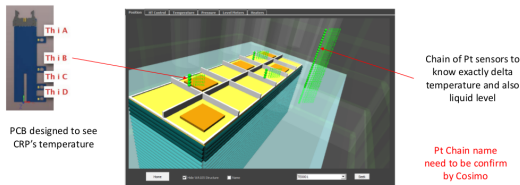
WA105



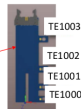
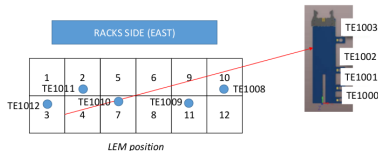
Temperature Sensors

- Good understanding of which sensor is where
- Group of sensors in a relevant way to make them understandable to the user
- Yann's explanation of the temperature and high voltage sensor mapping localisation

Detector Temperatures (TE0001 -> TE0084)



Heaters Temperatures (TE1000 -> TE1012)



Next steps

- Update of the DB-display stand-alone variant by October 1st
- Test the webpage variant by October 10th
- Almost final version of the interactive web display by October 24th
- Sensor name and description filling by October 17th

Many thanks to
Sebastien, Thierry and **Yann**
for fruitfull discussion

